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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,550	07/01/2003	David Ronald Harrison	NAIIP306/03.026.01	3611
28875	7590	12/21/2007	EXAMINER	
Zilka-Kotab, PC			LEE, PHILIP C	
P.O. BOX 721120				
SAN JOSE, CA 95172-1120				
			ART UNIT	PAPER NUMBER
			2152	
			MAIL DATE	DELIVERY MODE
			12/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/612,550

Applicant(s)

HARRISON, DAVID RONALD

Examiner

Philip C. Lee

Art Unit

2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7, 9-18, 20, 22-29 and 31-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 9-18, 20, 22-29 and 31-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

1. This action is responsive to the amendment and remarks filed on October 2, 2007.
2. Claims 1-5, 7, 9-18, 20, 22-29 and 31-33 are presented for examination and claims 6, 8, 19, 21 and 30 are canceled.
3. The text of those sections of Title 35, U.S. code not included in this office action can be found in a prior office action.

Claim Rejections – 35 USC 101

4. Claim 28 is rejected under 35 U.S.C. 101 because “A system” comprising a network analyzer (i.e., software) does not include any functional structure of a system (i.e. an apparatus). A system comprising software is considered as program per se, which is not one of the categories of statutory subject matter.
5. According to page 1, lines 13-14 of the specification, “a network analyzer” is a program (i.e., software). “A system” as claimed in claim 28 appears to be directed to a machine (i.e., system) not processes of a method. Therefore, it is lacking the necessary structural/mechanical element to be a system (i.e. hardware) as claim appears to be directed to solely to software processes (i.e., network analyzer). Claim 28 fails to fall within a statutory category of invention.

Claim Rejections – 35 USC 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claim 29 is rejected under 35 U.S.C. 102(e) as being anticipated by Pathak et al, U.S. Patent Application Publication 2003/0014128 (hereinafter Pathak)

8. Pathak was cited in the previous office action.

9. As per claim 29, Pathak teaches the invention substantially as claimed comprising:
a user interface for receiving input from a user ([0020],[0021]);
enabling a tunnel analysis based on the user input ([0019],[0022]); wherein the tunnel analysis includes analyzing data frames that are communicated utilizing tunneling ([0017] and [0021]-[0022]); wherein the analyzing is conditionally performed for one or more types of tunnels associated with the tunneling ([0020],[0021]).

Claim Rejections – 35 USC 103

10. Claims 1-2, 4, 7, 9, 14-15, 17, 20, 22 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sirbu, U.S. Patent 7,062,680 (hereinafter Sirbu) and Hippelainen, U.S. Patent Application Publication 20020078384 (hereinafter Hippelainen) in view of Pathak.

11. Sirbu and Hippelainen were cited in the previous office action.

12. As per claim 1, Sirbu teaches the invention substantially as claimed comprising:
establishing a connection with a communications network (col. 1, lines 30-32);
receiving, in real-time, data frames transmitted in the communications network (col. 1, lines 55-57, 62-65), and
analyzing the data frames that are communicated (col. 1, lines 50-65).

13. Sirbu does not teach utilizing tunneling. Hippelainen teaches analyzing the data frames are communicated utilizing tunneling ([0054], [0066], and [0072]).

14. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu and Hippelainen because Hippelainen's teaching of tunneling would enhance the process of analysis in Sirbu's system by allowing packets communicated utilizing tunneling to be analyzed.

15. Sirbu and Hippelainen do not specifically teach analyzing is conditionally performed. Pathak teaches wherein the analyzing is conditionally performed for one or more types of tunnels associated with the tunneling ([0021] and [0022]).

16. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu, Hippelainen and Pathak because Pathak's teaching of conditionally analyzing would increase the user flexibility of Sirbu's and Hippelainen's systems by allowing capture and analyze of information from particular data packets according to user specified constraints.

17. As per claim 14, Sirbu teaches the invention substantially as claimed comprising:
computer code for establishing a connection with a communications network (col. 1, lines 30-32);
computer code for receiving, in real-time, data frames transmitted in the communications network (col. 1, lines 55-57, 62-65); and
computer code for analyzing the data frames that are communicated (col. 1, lines 50-65).

18. Sirbu does not teach utilizing tunneling. Hippelainen teaches analyzing the data frames are communicated utilizing tunneling ([0054], [0066], and [0072]).

19. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu and Hippelainen because Hippelainen's teaching of

tunneling would enhance the process of analysis in Sirbu's system by allowing packets communicated utilizing tunneling to be analyzed.

20. Sirbu and Hippelainen do not specifically teach analyzing is conditionally performed. Pathak teaches wherein the analyzing is conditionally performed for one or more types of tunnels associated with the tunneling ([0021] and [0022]).

21. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu, Hippelainen and Pathak because Pathak's teaching of conditionally analyzing would increase the user flexibility of Sirbu's and Hippelainen's systems by allowing capture and analyze of information from particular data packets according to user specified constraints.

22. As per claim 28, Sirbu teaches the invention substantially as claimed comprising: a network analyzer coupled to a communications network for receiving, in real-time, data frames transmitted in the communications network, wherein the data frames that are communicated are analyzed (col. 1, 30-32, 50-65).

23. Sirbu does not teach utilizing tunneling. Hippelainen teaches analyzing the data frames are communicated utilizing tunneling ([0054], [0066], and [0072]).

24. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu and Hippelainen because Hippelainen's teaching of tunneling would enhance the process of analysis in Sirbu's system by allowing packets communicated utilizing tunneling to be analyzed.

25. Sirbu and Hippelainen do not specifically teach analyzing is conditionally performed. Pathak teaches wherein the analysis conditionally performed for one or more types of tunnels associated with the tunneling ([0021] and [0022]).

26. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu, Hippelainen and Pathak because Pathak's teaching of conditionally analyzing would increase the user flexibility of Sirbu's and Hippelainen's systems by allowing capture and analyze of information from particular data packets according to user specified constraints.

27. As per claims 2 and 15, Sirbu, Hippelainen Pathak and teach the invention substantially as claimed in claims 1 and 14 above. Hippelainen further teach wherein the tunneling involves a tunnel ([0072]).

28. As per claims 4 and 17, Sirbu, Hippelainen and Pathak teach the invention substantially as claimed in claims 2 and 15 above. Pathak further teach wherein the tunnel includes a General Packet Radio Service (GPRS) Tunnel Protocol (GTP) tunnel ([0017]).

29. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu, Hippelainen and Pathak for the same reason as set forth in claims 1 and 14 above.

30. As per claims 7 and 20, Sirbu, Hippelainen and Pathak teach the invention substantially as claimed in claims 1 and 14 above. Pathak further teach wherein the analyzing is conditionally performed based on user input ([0021],[0022]).

31. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu, Hippelainen and Pathak for the same reason as set forth in claims 1 and 14 above.

32. As per claims 9 and 22, Sirbu, Hippelainen and Pathak teach the invention substantially as claimed in claims 1 and 14 above. Pathak further teach wherein the analyzing is conditionally performed for one or more types of tunnels associated with the tunneling ([0016]) based on user input ([0021],[0022]).

33. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu, Hippelainen and Pathak for the same reason as set forth in claims 1 and 14 above.

34. Claims 3, 5, 10-13, 16, 18 and 23-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sirbu, Hippelainen and Pathak in view of Applicant Admitted Prior Art (hereinafter AAPA).

35. As per claims 3 and 16, Sirbu Hippelainen and Pathak teach the invention substantially as claimed in claims 2 and 15 above. Sirbu, Hippelainen and Pathak do not specifically teach Internet Protocol tunnel. AAPA teaches wherein the tunnel includes an Internet Protocol (IP) tunnel (see Specification, page 3, last paragraph).

36. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu, Hippelainen, Pathak and AAPA because AAPA's teaching of IP tunnel or any type of tunnel would increase the fields of use in Sirbu's, Hippelainen's and Pathak's systems by allowing packets communicated via different types of tunnel to be analyzed.

37. As per claims 5 and 18, Sirbu, Hippelainen and Pathak teach the invention substantially as claimed in claims 2 and 15 above. Sirbu, Hippelainen and Pathak do not specifically teach a Generic Routing Encapsulation (GRE) tunnel. AAPA teaches wherein the tunnel includes a Generic Routing Encapsulation (GRE) tunnel (see Specification, page 3, last paragraph).

38. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu, Hippelainen, Pathak and AAPA because AAPA's teaching of a Generic Routing Encapsulation (GRE) tunnel or any type of tunnel would increase the fields of use in Sirbu's, Hippelainen's and Pathak's systems by allowing packets communicated via different types of tunnel to be analyzed.

39. As per claims 10 and 23, Sirbu, Hippelainen and Pathak teach the invention substantially as claimed in claims 1 and 14 above. Sirbu, Hippelainen and Pathak do not protocol interpreters. AAPA teaches wherein the analyzing includes executing a plurality of protocol interpreters (see Specification, page 2, second paragraph).

40. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu, Hippelainen, Pathak and AAPA because AAPA's teaching of protocol interpreters would enhance the analysis of Sirbu's, Hippelainen's and Pathak's systems by allowing real-time parsing of protocol header in order to carry out network analysis.

41. As per claims 11 and 24, Sirbu, Hippelainen, Pathak and AAPA teach the invention substantially as claimed in claims 10 and 23 above. AAPA further teach wherein the plurality of protocol interpreters include an Internet Protocol (IP) protocol interpreter (see Specification, page 3, table 3)(IP EPIs).

42. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu, Hippelainen, Pathak and AAPA for the same reason set forth in claim 10 above.

43. As per claims 12 and 25, Sirbu, Hippelainen, Pathak and AAPA teach the invention substantially as claimed in claims 11 and 24 above. AAPA further teach wherein the IP protocol interpreter is re-executed to accommodate the tunneling (see Specification, page 3, second paragraph; 15, fig. 1A)(calling EPIs in the order of table 3).

44. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu, Hippelainen, Pathak and AAPA for the same reason set forth in claim 10 above.

45. As per claims 13 and 26, Sirbu, Hippelainen, Pathak and AAPA teach the invention substantially as claimed in claims 10 and 23 above. AAPA further teach wherein the plurality of protocol interpreters generate at least one object (see Specification, page 2, table 2)(identify and depict network object).

46. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu, Hippelainen, Pathak and AAPA for the same reason set forth in claim 10 above.

47. As per claim 27, Sirbu, Hippelainen, Pathak and AAPA teach the invention substantially as claimed in claim 26 above. Pathak further teach wherein statistics associated with the objects are displayed via a user interface ([0020]).

48. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu, Hippelainen, Pathak and AAPA for the same reason as claim 26 above.

49. Claims 31 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sirbu, Hippelainen, Pathak, AAPA in view of Lovy et al, U.S. Patent 7,069,480 (hereinafter Lovy).

50. As per claim 31, Sirbu, Hippelainen, Pathak and AAPA teach the invention substantially as claimed in claim 13 above. Sirbu, Hippelainen, Pathak and AAPA do not specifically teach statistics and diagnosed failure conditions are displayed. Lovy teaches wherein statistics and diagnosed failure conditions associated with the at least one object are displayed via a user interface (col. 10, lines 6-15; col. 11, lines 29-33; col. 12, lines 6-10; col. 35, lines 35-41, 44-50; col. 36, lines 6-14).

51. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu, Hippelainen, Pathak, AAPA and Lovy because Lovy's teaching of statistics and diagnosed failure conditions associated with the objects are

displayed via a user interface would allow user to view analysis of data packets via the user interface to identify communication errors.

52. As per claim 33, Sirbu, Hippelainen, Pathak and AAPA teach the invention substantially as claimed in claim 13 above. Sirbu, Hippelainen, Pathak and AAPA do not specifically teach adverse conditions for the at least one object are diagnosed and presented in a detailed screen. Lovy teaches wherein adverse conditions for the at least one object are diagnosed and presented in a detailed screen associated with the at least one object (col. 10, lines 6-15; col.12, lines 45-55; col. 35, lines 44-50).

53. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu, Hippelainen, Pathak, AAPA and Lovy because Lovy's teaching of adverse conditions are diagnosed and presented in a screen would allow user to view analysis of data packets via the user interface to identify communication errors.

54. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sirbu, Hippelainen, Pathak, AAPA in view of Poisson et al, U.S. Patent Application Publication 2004/0199624 (hereinafter Poisson).

55. As per claim 32, Sirbu, Hippelainen, Pathak and AAPA teach the invention substantially as claimed in claim 10 above. Sirbu, Hippelainen, Pathak and AAPA do not specifically teach multiple objects are linked to logically portray a relationship. Poisson teaches wherein multiple

objects generated by the plurality of protocol interpreters are linked to logically portray a relationship between endpoints of a tunnel and stations conversing inside the tunnel ([0059]) (hierarchical tree displaying the VPN elements).

56. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sirbu, Hippelainen, Pathak, AAPA and Poisson because Poisson's teaching of displaying multiple objects linked to logically portray a relationship would enable a user in their systems to quickly find and analyze the multiple objects.

57. Applicant's arguments with respect to claims 1-5, 7, 9-18, 20, 22-29 and 31-33, filed 10/2/07, have been fully considered but they are not persuasive.

58. In the remark, applicant argued that:

(1) Pathak fails to teach enabling a tunnel analysis based on the user input.

(2) Pathak fails to teach the analyzing is conditionally performed for one or more types of tunnels associated with the tunneling.

(3) Pathak fails to teach wherein the analyzing is conditionally performed for one or more types of tunnels associated with the tunneling based on user input.

(4) AAPA fails to teach IP protocol interpreter is re-executed to accommodate the tunneling.

59. In response to points (1)-(3), Pathak teaches packets such as GPRS tunneling protocol packet data ([0017]) are analyze and capture based on user inputted constraint ([0021] and [0022]). This means that analyze and capture are imposed, depending on specified constraints (i.e., conditionally performed). Pathak further teach by specifying the constraint, it enables capture of information from particular data packet satisfying the specified constraints ([0022]). This means capture of information, which is part of the analyzing of the GPRS tunneling packets is made possible based on the user specified constraints (i.e., enabling the tunnel analysis based on user input).

60. In response to point (4), the combination of Sirbu and Hippelainen teaches to accommodate the tunneling (see rejection of claim1 above), however, the combination of Sirbu and Hippelainen does not teach IP protocol interpreter is re-executed. AAPA teaches calling (i.e., executing) the EPIs (i.e., IP protocol interpreters) in the order shown in Table 3 (page 3, 2nd paragraph of the specification). According to Table 3, EPIs are called for in the order of ETHER (first), IP (2nd), TCP (3rd), etc. This means the EPIs are called to analyze ETHER, and called again for analyze IP, and so on according to the order of Table 3 (i.e., IP protocol interpreters are re-executed for analysis). Therefore, the combination of Sirbu, Hippelainen and AAPA teaches re-executing IP protocol interpreter to accommodate tunneling data packets.

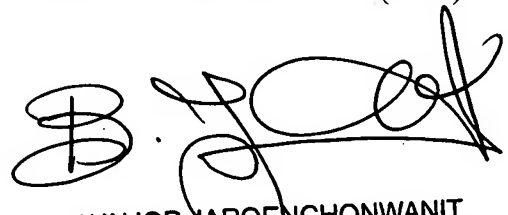
61. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action

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is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip C Lee whose telephone number is (571)272-3967. The examiner can normally be reached on 8 AM TO 5:30 PM Monday to Thursday and every other Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

P.L.


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SUPERVISORY PATENT EXAMINER
12/17/07